main.java

Share Run

```java
//1. Develop a Java program to take user input for name and age and
    display a

import java.util.Scanner;
public class main {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter your name: ");
        String name = scanner.nextLine();
        System.out.print("Enter your age: ");
        int age = scanner.nextInt();
        scanner.nextLine();
        System.out.println("Welcome " + name + "!");
        System.out.println("You are " + age + " years old.");
        scanner.close();
    }
}

```

Output

```
Enter your name: rounakwanjari
Enter your age: 20
Welcome rounakwanjari!
You are 20 years old.

=== Code Execution Successful ===
```

LargestSmallest.java

Share Run

```java
//11. Write a Java program to find the largest and smallest number in an array.

public class LargestSmallest {
    public static void main(String[] args) {
        int[] arr = {12, 34, 5, 89, 23, 56};
        int largest = arr[0];
        int smallest = arr[0];
        for (int num : arr) {
            if (num > largest) {
                largest = num;
            }
            if (num < smallest) {
                smallest = num;
            }
        }
        System.out.println("Largest number: " + largest);
        System.out.println("Smallest number: " + smallest);
    }
}
```

Output

```
Largest number: 89
Smallest number: 5

=== Code Execution Success
```

BubbleSort.java

Share Run

```java
//12. Develop a program to sort an array using bubble sort algorithm.

public class BubbleSort {
    public static void main(String[] args) {
        int[] arr = {64, 25, 12, 22, 11};
        for (int i = 0; i < arr.length - 1; i++) {
            for (int j = 0; j < arr.length - i - 1; j++) {
                if (arr[j] > arr[j + 1]) {

                    int temp = arr[j];
                    arr[j] = arr[j + 1];
                    arr[j + 1] = temp;
                }
            }
        }
        System.out.print("Sorted array: ");
        for (int num : arr) {
            System.out.print(num + " ");
        }
    }
}

```

Output

```
Sorted array: 11 12 22 25 64
=== Code Execution Successful ===
```

FahrenheitToCelsius.java

Share Run

```java
//3. Create a program to convert temperature from Fahrenheit to Celsius

import java.util.Scanner
public class FahrenheitToCelsius {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter temperature in Fahrenheit: ");
        double fahrenheit = scanner.nextDouble();
        double celsius = (fahrenheit - 32) * 5 / 9;
        System.out.println("Temperature in Celsius: " + celsius);
        scanner.close();
    }
}

```

Output

```
Enter temperature in Fahrenheit: 144
Temperature in Celsius: 62.22222222222222

=== Code Execution Successful ===
```

Main.java

Share Run

```java
//4. Design a Java application to calculate simple interest using the
    formula: SI = (P ×


import java.util.Scanner;
public class task_4{
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter the principal amount (P): ");
        double principal = scanner.nextDouble();
        System.out.print("Enter the rate of interest (R): ");
        double rate = scanner.nextDouble();
        System.out.print("Enter the time period (T) in years: ");
        double time = scanner.nextDouble();
        double simpleInterest = (principal * rate * time) / 100;
        System.out.println("Simple Interest (SI): " + simpleInterest);
        scanner.close();
    }
}
```

Output

```
Enter the principal amount (P): 1000
Enter the rate of interest (R): 4
Enter the time period (T) in years: 1
Simple Interest (SI): 40.0

=== Code Execution Successful ===
```